

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/089003 A1

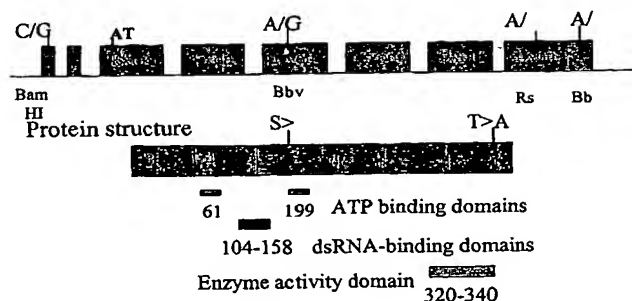
- (51) International Patent Classification⁷: **A61K 45/00**,
G01N 33/50, A61K 31/7088, C12Q 1/68, A61K 38/53,
48/00, A61P 31/14, A61K 38/53, 38/21
- (21) International Application Number: PCT/GB03/01625
- (22) International Filing Date: 15 April 2003 (15.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0208928.2 19 April 2002 (19.04.2002) GB
- (71) Applicant (for all designated States except US): **IMPERIAL COLLEGE INNOVATIONS LIMITED**
[GB/GB]; Sherfield Building, Imperial College, London
SW7 2AZ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HILL, Adrian**
[GB/GB]; Nuffield Department of Medicine, John Radcliffe
Hospital, Oxford OX3 9DU (GB). **THURSZ, Mark**
[GB/GB]; Imperial College of Science, Technology &
Medicine, St Mary's Hospital, South Wharf Road, London
- W2 1NY (GB). **KNAPP, Susanne** [GB/GB]; Imperial
College of Science, Technology & Medicine, St Mary's
Hospital, South Wharf Road, London W2 1NY (GB).
- (74) Agent: **PILKINGTON, Stephanie**; Eric Potter Clarkson,
Park View House, 58 The Ropewalk, Nottingham NG1
5DD (GB).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report

[Continued on next page]

(54) Title: METHODS OF TREATMENT AND DIAGNOSIS OF PATIENTS WITH HEPATITIS C INFECTION

Schematic of the OAS1 gene showing intron/exon structure and
protein structure

Genomic structure



(57) Abstract: Use of a compound capable of modulating the level of activity of the OAS¹ gene and/or activity of the OAS protein, in the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA). A method of screening for compounds for treating HCV infection, wherein a cell is treated with a test compound and any change in OAS gene activity and/or OAS protein activity or level is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA). Use of a compound capable of modulating the level of activity of the RNase L gene and/or activity of the RNase L protein, in the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA). A method of screening for compounds for treating HCV infection, wherein a cell is treated with a test compound and any change in RNase L gene activity and/or RNase L protein activity or level is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA).



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.